

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Use of Spectrum Bands Above 24 GHz For)	GN Docket No. 14-177
Mobile Radio Services)	
)	

COMMENTS OF AT&T SERVICES, INC.

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I. INTRODUCTION AND SUMMARY

AT&T Services, Inc., on behalf of the subsidiaries and affiliates of AT&T Inc. (collectively, “AT&T”), hereby submits the following comments in response to the Federal Communications Commission’s (“Commission” or “FCC”) Fourth Further Notice of Proposed Rulemaking in the above-captioned proceeding.¹ AT&T strongly supports the Commission’s proposal to reduce the impact of 39 GHz encumbrances through an incentive auction. AT&T also agrees that the minor re-channelization proposed will render the process simpler by reducing fractional encumbrances on licenses. Further, AT&T supports the proposed system of vouchers to realign the spectrum in an equitable and market-oriented fashion. AT&T proposes several minor modifications to the Commission’s auction process, however, all designed to facilitate a smooth and efficient auction process.

AT&T is gratified that the Commission has embraced a plan for rationalizing 39 GHz encumbrances through the use of market-driven voucher and incentive auction mechanisms. AT&T strongly believes that a voucher-based incentive auction would be beneficial both to

¹ *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, GN Docket No. 14-177, Fourth Further Notice of Proposed Rulemaking, FCC 18-73 (August 3, 2018) (“*Fourth FNPRM*”).

incumbents and new entrants, and is the best prospect for carriers to aggregate the large bandwidths necessary to maximize the benefits of millimeter wave spectrum for 5G services. This plan balances the public interest benefits of rationalizing spectrum holdings post-auction into large contiguous blocks for each licensee, while respecting the rights of incumbents who may or may not wish to participate in an auction.

II. AT&T SUPPORTS THE PROPOSED BANDPLAN MODIFICATIONS TO BETTER ALIGN INCUMBENT RIGHTS WITH NEW LICENSES

As an initial matter, AT&T supports the overall licensing framework proposed for the band, which, as explained below, has synergies with the proposed auction design. Specifically, AT&T supports the use of Partial Economic Area (“PEA”) licenses and 100 MHz blocks.² As noted in the *Fourth FNPRM*, while the Commission had originally proposed 200 MHz channelization, there is a “natural fit between incumbents’ existing 100 megahertz holdings and the proposed 100 megahertz channels, [and therefore] the resulting realignment process for incumbents would be less complex than using 200 megahertz channels, because it would result in far fewer partially-filled channels.”³ In other words, because existing licensees have paired 50 MHz × 50 MHz spectrum blocks, using 100 MHz increments provides better opportunities for a voucher holder to be able to obtain a whole new license, whereas a 200 MHz channelization scheme could leave many with “half” of a license. Moreover, because the Commission is adopting an auction structure that guarantees contiguity of licenses, the reduction in channel size will not limit bidders’ ability to create licenses that provide larger bandwidths. And, consistent with what AT&T has said in other contexts, extending that channelization throughout the 37.6-

² *Id.* at ¶¶4, 9.

³ *Id.* at ¶9.

40 GHz band—and to the 47.2-48.2 GHz band—aligns the Upper Microwave Flexible Service (“UMFUS”) regulations and simplifies spectrum management across bands.⁴

III. THE COMMISSION’S AUCTION PROPOSAL IS FUNDAMENTALLY SOUND, BUT THERE ARE MINOR MODIFICATIONS AND CLARIFICATIONS THAT SHOULD BE ADDRESSED TO AVOID GAMING OR UNINTENDED CONSEQUENCES

AT&T also strongly agrees with the Commission that it is appropriate to use a pre-auction voucher exchange coupled with an incentive auction to reduce encumbrances and optimize rational market-based outcomes for the 37.6-40 GHz band.⁵ While AT&T supports the Commission’s other mechanisms for reducing encumbrances and enhancing contiguity among licensees, such as the voluntary swap system,⁶ the voucher-based incentive auction is the only way the Commission can protect against encumbrances fragmenting available bandwidth or limiting the amount of auctionable spectrum. Accordingly, the proposed system benefits new entrants to the band as well as incumbent licensees, as both groups will be able to secure contiguous licenses of any size. This system therefore will allow the auction to more precisely identify the highest value uses of the spectrum. While achieving this will necessarily require a mandatory repack of licensees who choose not to participate at all, far more complex obstacles

⁴ Standardization of license blocks sizes would be even more important if the Commission is able to conduct the 47 GHz auction at the same time as the 37.6-40 GHz auction. While AT&T does not believe the 37.6-40 GHz auction should be delayed to allow the 47 GHz band to be auctioned at the same time, if the availability of the 47 GHz band can be accelerated to coincide with the upcoming 37.6-40 GHz auction, standardized channels would allow bidders to substitute and complement channels in a way that may result in more efficient allocations.

⁵ *Fourth FNPRM* at ¶15.

⁶ See *Wireless Telecommunications Bureau Accepting Applications to Modify Existing Licenses in the 39 GHz Band Pursuant to Voluntary Rebidding Process*, GN Docket No. 14-177, Public Notice, DA 18-619, at 5 (WTB, rel. Jun. 14, 2018) (“*Voluntary Rebidding PN*”).

were negotiated for the recent, and successful, 600 MHz Incentive Auction.⁷ As the Commission states, the combination of these policies “will enable us to auction much of the combined 2400 megahertz in the Upper 37 GHz and 39 GHz bands as near-nationwide contiguous spectrum in a single generic-block, clock auction.”⁸

The Commission’s auction construct involves several key elements. First, the proposal permits existing licensees who do not wish to participate to be relocated to the top end of the band, preserving existing uses while imposing only minimal burdens.⁹ Second, the proposal allows incumbents to trade licensed spectrum for “vouchers,” the value of which will be established by the spectrum auction.¹⁰ By establishing an actual, market-established price for incumbent spectrum holdings, the Commission’s proposed mechanism will create incentives for incumbents who value their spectrum less than auction prices—possibly because they are able to accommodate their needs with lower-valued frequencies—to exit the band and be fairly compensated. It simultaneously allows incumbents who intend to secure additional spectrum to participate in the process in an equitable way and take advantage of the contiguity-enhancing aspects of the auction. Third, the proposal utilizes a two-phase auction—a clock phase and an assignment phase—to allow bidders to acquire the amount of spectrum best suited to their needs,

⁷ See generally, *Incentive Auction Closing And Channel Reassignment Public Notice—The Broadcast Television Incentive Auction Closes; Reverse Auction And Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, AU Docket No. 14-252, Public Notice, DA 17-314 (rel. Apr. 13, 2017). Notably, the 600 MHz Incentive Auction had to address incumbent television stations that involved a completely different use of spectrum, had interference profiles that were much more difficult to calculate, and encompassed multiple channels. The existing 39 GHz uses, in contrast, fall within similar parameters to the newly authorized services and have similar channelization.

⁸ *Fourth FNPRM* at ¶9.

⁹ *Id.* at ¶¶38-43.

¹⁰ *Id.* at ¶20.

while guaranteeing the maximal degree of contiguity.¹¹ Finally, the Commission has proposed to permit incumbents with vouchers to participate in some form of pre-auction exchange to promote rationalization of licenses.¹²

AT&T strongly supports the basic framework proposed by the Commission. While there are obvious edge cases that require evaluation to prevent opportunities for gaming or unintentionally dissuading participation by incumbents, the proposal is fundamentally sound and promotes important public policy goals. AT&T has discussed below some specific areas where it has identified clarifications or modifications calculated to better achieve the desired policy outcomes. While these are important to address, the fundamental framework of the Commission is sound.

Voucher Calculation. The Commission’s voucher system is designed so that incumbent vouchers “have a dollar value equal to the final clock phase price (for a single generic block under the new band plan) in the PEA times the ratio of the incumbent’s MHz-pops to the MHz-pops in a full generic block.”¹³ While the terms of the voucher are generally well-defined, there is a question of how the “incumbent’s MHz-POPs” would be calculated because the rectangular service area (“RSA”) licenses do not conform to Census boundaries or other known population references. AT&T would suggest that “incumbent MHz-POPs” be defined as the bandwidth for the license multiplied by the sum of the 2010 Census population in all tracts wholly within the RSA and the proportional 2010 Census population of any tracts not wholly within the RSA, where the proportional population is defined as the 2010 Census population of the tract

¹¹ *Id.* at ¶16.

¹² *Id.* at ¶¶31-37.

¹³ *Id.* at ¶20.

multiplied by the tract land area in the covered portion of the tract, divided by the total land area of the tract. In other words, the population of an RSA would be calculated by reference to 2010 Census tracts, where population is averaged over the land area for partially covered tracts. This provides an objective means to calculate vouchers that can be applied by any licensee.

Pre-Auction Voucher Exchange Issues. The *Fourth FNPRM* proposes development of pre-auction voucher exchange rules to “aid incumbent licensees in minimizing the number of PEAs going into the auction in which they would have only fractional vouchers—and thus no ability to assure themselves that they could exit the auction with a whole number of new licenses without making net payments to secure their spectrum holdings.”¹⁴ However, as previously noted, the dollar value of a voucher is tied to the auction value of the market, as defined in the auction. Because markets will not have equivalent values, permitting voucher exchanges involving different markets requires the establishment of a set of exchange rates defining the relative value of different markets. While AT&T generally believes that a pre-auction voucher exchange has the potential to facilitate rationalization of a larger base of incumbent licenses, there is the potential for the auction exchange to affect auction outcomes.

AT&T suggests that, if a pre-auction voucher exchange is created, the Commission carefully consider the design. AT&T suggests that a one-time exchange might reduce the potential for unanticipated, harmful auction interaction—a one-time exchange would allow each incumbent participating in the exchange to independently determine the exchanges it desires solely based on the Commission’s defined exchange rates and its own voucher position. In such a scenario, each bidder, without interacting with other bidders, would identify the vouchers it desires to offer and, based on the published exchange rates, what vouchers it desires to receive.

¹⁴ *Id.* at ¶30.

This limits the potential for voucher exchange participants to utilize information about other parties' proposals and game the system by identifying markets where demand may be artificially impacted by pre-auction shortages or similar factors. In fact, to the extent information about the pre-auction voucher exchange could enable gaming by auction participants, the Commission should consider withholding such information until all phases of the auction are complete.

AT&T also supports the other proposed restrictions on voucher exchanges, which seem to be targeted at holders of vouchers who both participate in the pre-auction exchange and the subsequent auction and are designed to avoid gaming that could impact auction efficiency.

Specifically, the *Fourth FNPRM* proposes that:

- “[N]et trades for each incumbent over all PEAs be revenue neutral, i.e., aggregate trades up and down will balance given the FCC-specified exchange rates.”¹⁵
- “Vouchers could only be exchanged up or down to no more than the nearest integer above or no less than the nearest integer below their current fractional voucher holdings.”¹⁶
- “If there exists a PEA in which it is not feasible for all incumbent licensees to ‘trade up’ within the 39 GHz band, we propose that incumbent licensees would only be permitted to ‘trade down.’”¹⁷

AT&T believes that these restrictions are appropriate and are reasonably calculated to avoid distorting the auction. However, with respect to the restriction on “trading up” in the event that it would result in too many vouchers in the 39 GHz band, the FCC might consider a less restrictive alternative. Specifically, the FCC could establish a rule permitting the incumbents with the largest fractional vouchers to trade up, effectively creating a threshold voucher fraction

¹⁵ *Id.* at ¶34.

¹⁶ *Id.* Among other things, this would preclude an incumbent from trading “into” a market where it has no holdings.

¹⁷ *Id.*

for each PEA where the concern arises.¹⁸ This would treat incumbents disparately based on the percentage of the PEA their original RSA or encumbered PEA license covered, but that does not intrinsically seem to be inappropriate, particularly since this approach would maximize the number of incumbents that could trade up.

The Commission should also clarify that, for the purpose of creating a more flexible and therefore meaningful exchange, auction participants will be allowed to exchange initial voucher positions for non-whole block amounts in more than one PEA. This clarification should impose two restrictions, however. A pre-auction exchange voucher participant participating in the auction:

- should never be permitted to end up holding fractional vouchers in more PEAs than it held before the exchange happened, and
- should not be able to accumulate a fractional (or whole) voucher position in a PEA where it initially had no fractional voucher to begin with.

AT&T suggests that the combination of these restrictions would result in a more rationalized pre-auction voucher position for each pre-auction voucher holder who participates in the auction, while ensuring that pre-auction voucher holdings do not spread in ways that are significantly inconsistent with what they were before the enactment of the exchange.

¹⁸ The Commission could consider the allowance of trade-ups to the extent they could be made without violating the maximum voucher constraint, but only for voucher holders with positions closest to the next whole voucher amount. For example, suppose that there are 8 voucher holders in a PEA, but insufficient unallocated spectrum in the 39 GHz band to allow for 8 “trade-ups.” Specifically, suppose that only 1.2 100 MHz blocks could be allocated as trade-ups. If the fractional incumbent amounts in the PEA in descending order are 0.9, 0.85, 0.6, 0.5, 0.3, 0.2, 0.15, and 0.1, then allowing all 8 trade-ups would require 4.4 blocks of free spectrum and exceed the 1.2 blocks available. However, only 1.15 blocks would be required to allow the 4 largest fractional incumbents to trade up. Hence, in this market, the FCC would constrain trade-ups to incumbents with fractional holdings of 0.5 or more.

AT&T also observes that there may be parties who desire to participate in a separate pre-auction exchange to rationalize their holdings without entering the incentive auction and therefore receiving vouchers. By allowing pre-auction exchanges without any obligation to participate in the auction, the Commission could potentially deter auction participation and undermine full band rationalization. On the other hand, there are also clear benefits to permitting these licensees to rationalize their own holdings, and that should be efficiency-enhancing as an overall matter. On balance, AT&T suggests permitting such pre-auction exchanges, but subject to rules that these incumbents:

- should be able to trade up or trade down by no more than one 100 MHz block within a PEA, so, for example, if a voucher holder held a position of 0.25 in a PEA, they could end up with only a modified position of 0 or 1 post-exchange, as explained further below;
- should not be permitted, on a net trade basis in accordance with FCC-established exchange rates, to achieve a better than revenue neutral result;
- should be restricted in their ability to make trade-up requests in any PEA in which, if all incumbents (both bidders participating in the voucher program and incumbents engaging only in the pre-auction exchange) were to trade up within the PEA, then the total incumbent position would exceed the maximum allowable position;¹⁹ and
- should not be allowed to trade up from a zero position in a PEA.

Finally, and most importantly, non-bidders participating in the pre-auction exchange should not be permitted to end up with fractional modified license positions. In other words, if the goal of the voucher system is to rationalize away partial encumbrances, non-bidders should not be permitted to retain partial holdings that violate that public policy goal. This has the added

¹⁹ Ultimately, the FCC must determine the correct set of rules in this scenario. AT&T believes, however, that an efficiency justification could be made that auction participants be considered for trade-ups before incumbents participating in only the pre-auction exchange.

benefit of allowing the Commission to permit these bidders to participate in the assignment phase of the auction, which could be beneficial for both the incumbent and new entrants.

Tax Liability for Exchanged Licenses. To encourage the broadest rationalization of incumbent licenses possible, the Commission should work to eliminate any tax disincentives that would disfavor swaps, exchanges, or participation in voucher-based programs. While the conversion of a license into cash as a result of the auction would likely be, and should probably be, a taxable event, that result should not attach in the case of like-kind swaps of licenses or vouchers, or even a case where a voucher rationalization would have resulted in a cash payout, but where the payout is netted out to zero by liabilities associated with other auction bids. AT&T believes that participation in these rationalization mechanisms will serve the public interest, and as such the Commission should take steps to ensure that tax regulations do not have the effect of discouraging such participation. AT&T suggests the Commission could, as it has done in other contexts, seek a ruling from the Internal Revenue Service that such exchanges are not taxable events.²⁰

Alternative Proposals. As a final matter, the *Fourth NPRM* requests comment on several proposals that create alternatives to the proposed framework. Specifically, the Commission seeks comment on assigning “incumbents . . . license(s) for all vouchers that are equivalent to a whole number of new license(s) without bidding at all in the clock phase,” although “[t]he

²⁰ To the extent the tax treatment is dependent upon whether a spectrum exchange is voluntary or involuntary, the letter should also request clarification of (i) whether an incumbent that does not participate in the clock auction and is required to relocate, but does participate in the assignment round, should be considered a “voluntary” or “involuntary” relocater; and, (ii) whether that determination should be affected by whether the assignment-only participant “wins” the assignment round, either by having the selected bid, or some other criteria, such as receiving its preferred assignment outcome, regardless of whether its bid was selected.

specific frequencies for these licenses would be assigned in the assignment round.”²¹ The second alternative would be that “[a]ll encumbered licenses would . . . be required to be converted to vouchers, since, were these licensees to hold out, this would leave spectrum that could not fit into the new band plan and thereby reduce the efficiency of the auction,” but incumbents would have “the option of converting their unencumbered generic PEA blocks to vouchers if they so choose.”²² AT&T generally believes both of these proposals, if implemented, would reduce the efficiency of the auction. In both cases, incumbents would potentially not have the ability to respond to the opportunity cost of holding a “whole” license if prices became sufficiently high that they desire to sell out, even if they did not envision that result before the auction commenced. At the same time, because licensees will always have the ability to convert a voucher for a whole market into a license for that whole market during the auction, the alternative proposals do not increase the flexibility for any licensees.

IV. CONCLUSION

AT&T strongly supports the Commission’s framework for a voucher-based incentive auction to rationalize incumbent holdings and distribute licenses for the 37.6-40 GHz band. Fundamentally, the plan balances the public policy benefits of allowing market forces to guide the formation of the large bandwidth licenses that will maximize the benefits of 5G services, while minimally burdening incumbents. AT&T believes the FCC should adopt the basic proposal as framed in the *Fourth FNPRM*, a recommendation tempered only by the suggestions herein to address some edge cases and scenarios in a way that facilitates an efficient auction outcome. While it is critical to get governing principles correct to avoid gaming or dis-

²¹ *Id.* at ¶28.

²² *Id.* at ¶29.

incentivizing participation by incumbents, these comments should not be read as derogating the basically sound structure of the Commission's proposal.

Respectfully Submitted,

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